ABSTRACT

An IC chip for a magnetic impedance (MI) sensor includes an MI element electrode, a switch unit, and a power supply electrode, wherein the MI element electrode is disposed in the neighborhood of a first side face of the IC chip, and the power supply electrode is disposed in the neighborhood of a second side face opposite the first side face. A power supply voltage is provided to the switch unit through the power supply electrode, and a high frequency pulse exciting current is provided to the MI element through the MI element electrode. Since the first power supply electrode and the MI element electrode are disposed at a distance, noise generated by the high frequency pulse exciting current is prevented from superposing the signals of circuits other than the switch unit.